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ABSTRACT

This volume provides listings and brief descriptions of instructional materials for use in teaching the metric system. Printed materials of three types (duplicating masters, periodicals, and U.S. Government documents) are included. Other materials described include charts, films, filmstrips and slides, games, posters, recordings, and transparencies. For most items the listing provides suggested grade levels, a brief description, source, catalog and/or other information for use in ordering, and price. Names and addresses of publishers and producers are provided. (SD)

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speed  
**90**  
kmph  
limit

**COFFEE**  
**1 kilogram**

**500grams**

**\$ 2.50**

**1**  
liter

columbus  
45km  
louisville  
147 km

**126**  
cm

# **THE METRIC SYSTEM: A Bibliography of Instructional Materials**

**Second Revised Edition**

ED104718

**THE METRIC SYSTEM:  
A BIBLIOGRAPHY OF INSTRUCTIONAL MATERIALS**

Second Revised Edition

Published jointly by  
The Metropolitan School District of Wayne Township  
Dr. Sidney Spencer, Superintendent

and

The Indiana Department of Public Instruction  
Dr. Harold H. Negley, Superintendent

Indianapolis, Indiana

January, 1975

## **PREFACE**

This bibliography has been compiled to fill a need arising from the contemplated adoption of metric units of measurement in the United States. The metric system will soon become an integral part of the curriculum of our schools, and educators and citizens are interested in knowing what materials and methods are available for becoming proficient in its use. The media staff of the Metropolitan School District of Perry Township did the preliminary research of these titles in preparation for a metric fair held in March, 1974. The project then became a cooperative effort of the Metropolitan School District of Wayne Township and the Division of Instructional Media of the Indiana Department of Public Instruction.

Many of the materials listed here have been purchased by the Metropolitan School District of Wayne Township through an ESEA Title II Special Purpose Grant. The materials are available for examination at Rhoades Elementary School and are also being exhibited throughout Indiana at various professional meetings and workshop sessions.

The materials listed here represent a cross-section of materials presently available. Obviously, no listing can be all-inclusive nor remain up-to-date for long. Prices, in particular, change from day to day. It should be emphasized that this bibliography does not constitute an official list; it does not indicate an endorsement of any kind. It is to serve only as a guide. Judgments concerning the appropriateness of instructional materials must be made on the basis of the needs of the specific learners under consideration.

Coordination of this project and compilation of both editions of the bibliography have been the responsibility of Karen G. Beam, Instructional Media Consultant. The efforts of the media personnel of the Metropolitan School District of Wayne Township in implementing the project have been coordinated by Margaret Kelley, Librarian at Rhoades Elementary School.

Phyllis Land, Director  
Division of Instructional Media  
Indiana Department of Public Instruction

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## PRINTED MATERIALS

Adams, H.F.R. *SI Metric Units*. New York: McGraw-Hill, n.d. Gives a good insight into SI units.

Anderton, Pamela, and Biggs, P.H. *Changing to the Metric System*. Palo Alto, Calif.: Pendragon, n.d. (\$1.00)

Beloit Tool Corporation. *U.S.A. "Goes Metric"*. Roscoe, Illinois: Swani Pub. Co., 1970. Gr. 7-Up. 1-9 copies - \$2.50 each, 10-24 copies - \$1.50 each, 25-99 copies - \$1.00 each, 100 - 500 copies - \$.50 each.

Collection of essays and articles about the metric system in general and about its implications for the tool industry in particular.

Bielefeld, C. *A Metric Workbook for Teachers of Consumer & Homemaking Education*. Santa Ana, Calif.: 1973. Orange County Dept. of Education. (\$1.50)

Bowles, D. Richard. *Make Way for Metrication*. Minneapolis: Lerner Publishing, 1973. (\$3.95)

Branley, Franklyn M. *Think Metric*. New York: Crowell, 1972. Elem.-Jr. High (\$4.50)

Contrasts the English system of measurement with the metric system; describes how accurate standards of measurements were determined for time, length, width, volume, temperature and weight, with emphasis on advantages of the metric system. Contains ideas for developmental activities with large and small groups of students.

Buckeye, Donald A. *I'm Ok, You're Ok, Let's Go Metric*. Troy, Michigan: Midwest Publications Co. 1973. Adult. (\$3.25)

Teacher manual designed to introduce the metric system through exciting activities, which are divided into four reading levels - no read, low read, medium read, and high read. The activities are in tear-out form. Most equipment needed and selected answers are listed at the end of the book.

Buckeye, Donald A. *Introducing the Metric System with Activities*. Troy, Michigan: Midwest Publications, n.d. Gr. 5-12. Paper (\$1.50)

Fifty experiments on length, area, volume, liquid measurement, weight, and temperature. The student actually measures when he does these experiments. Good outline with good ideas for activities.

Buffington, Audrey V. *Meters, Liters & Grams; A Study of the Metric System*. New York: Random House, 1973. Gr. 3-8, (\$1.44 each)

Set of 6 colorful student workbooks designed to supplement basal math or science programs. Each workbook is a self-contained course using language and activity ideas appropriate for the grade level. No clumsy and confusing conversions to the English System.

Cameron, Clive. *Going Metric With the U.S. Printing Industry*. Rochester, N.Y.: Graphic Arts Research Center, Rochester Institute of Technology, 1972. (\$8.70)

Comprehensive review of international metric developments as they relate to the graphic arts industry.

Cherrington, Don. *Metric Workshop for Teachers, Book 6*. Stockton, California: Willow House, 1974. Adult (\$2.50)

A programmed workbook for introducing teachers to the metric system including activities in length, weight, area, volume, capacity, and temperature. There are plans for discussions and individual projects in metrics. The activities could be used with students.

Clack, Alice A., and Leitch, Carol H. *Amusements in Developing Metric Skills*. Troy, Michigan: Midwest Publications Co., 1973. (\$3.75)

Teacher manual consisting of various types of puzzles which the student solves by working problems within the metric system. Includes a measurement worksheet, game, and bulletin board ideas, a ruler master, and useful tables. In tear-out form for reproducing.

Cynewski, L. L. *Let's Think Metric*. Washington, D.C.: AHEA, 1974 Jr.-Sr. High (1 Teacher-Student package \$2.00, Additional student sections – package of 10, \$3.00)

A learning package designed for self-instruction, including alternative activities. Acquaints student with basic metric measures used in everyday living, offers practice in conversion, and suggests ways for student to think in metric terms.

Deming, Richard. *Metric Power: Why and How We are Going Metric*. New York: Nelson, 1974. Gr. 6-Adult. (\$5.95)

Traces history of the way weights and measures developed. Covers the advantages of the metric system and discusses how metrication will affect both businesses and individuals.

Donovan, Frank. *Prepare Now for a Metric Future*. New York: Weybright and Talley, 1971. Senior High. (\$5.95)

Fairweather, Leslie, and Sliwa, Jan. *Metric Handbook*. New York: Van Nostrand Reinhold, 1972. (\$5.95)

Fearon, Arthur. *Everyday Metrics*. Stockton, California: Willow House 1974. Gr.-9-Adult. (\$2.50)

Rather sophisticated for the general student, this book is well organized and put together in logical progression, with emphasis on working with decimals and using tables. For the student entering specialized fields requiring metric knowledge.

Fey, James T. *Long, Short, High, Low, Thin, Wide*. New York: Crowell, 1971. Primary. (\$3.75)

A very elementary introduction to basic concepts of linear measurement, including a brief account of linear metric units of measure.

*Fun With Metric Measurement*. Chicago, Illinois: Educational Teaching Aids, 1973. Gr. 3-6. (\$4.95)

The work activities for meters, liters, and grams are sequenced, motivating, and self-directing. There is a variety of activities for measuring and estimating in metric units. Permission is granted to reproduce the sheets.

Gallant, Roy A. *Man the Measurer: Our Units of Measure and How They Grew*. Garden City, N.Y.: Doubleday, 1972. Intermediate. (\$4.95)

Historical account with plenty of facts, thought-provoking questions and a strong argument for adoption of the metric system.

Gardner, Robert, and Swartz, Clifford. *Measurement: Concepts and Applications*.

Boston: Houghton-Mifflin, 1974. Gr. 4-6. (Pupil text – \$1.68 each, Teacher's Guide – \$1.47 each, Tests on duplicating masters – \$13.50)

Consumable texts with activities from areas of science, commerce, travel, construction trades, and sports. Metric units used exclusively with no conversions between conventional and metric units. Different text for each grade level.

Gilbert, Thomas F., and Gilbert, Marilyn B. *Thinking Metric*. New York: Wiley, 1973. (\$2.95)

Programmed instruction text.

Glaser, Anton. *Neater by the Meter: An American Guide to the Metric System*. Southampton, Pa.: Anton Glaser, 1974. Adult (\$3.50)

Handbook giving basic information on the SI system of measurement. Covers common questions concerning the changeover to the metric system. Includes a chapter on recommended teaching practices.

*Handbook for Hospitals*. Boulder, Colo.: Metric Association, n.d. (1 copy, \$0.50; pkg. of 10, \$4.50)

Booklet that explains the uses and application of the metric system. Order from Ideal School Supply Company.

Hansen, Gary G. *A Guide to the Metric System*. West Lafayette, Ind.: Purdue University, 1972.  
(Available free from Research Coordinating Unit of the Division of Vocational Education of Indiana Department of Public Instruction, 120 W. Market Street — 16th Floor, Indianapolis, Ind. 46204. Phone: 633-4841.

A student reference guide to the very basic concepts of the metric system. Illustrations and textual material covers length, area, volume, weight, mass, time, temperature and luminous intensity.

Harris, Frank E. *Numbers and Units for Science*. Palo Alto, Calif.: Behavioral Research Laboratory, n.d. (\$5.61)

Henderson, George L., and Glunn, Lowell. *Let's Play Games in Metrics*. Skokie, Illinois: National Textbook Co., 1974. Gr. 3-Adult. (\$6.25)

Part I is a metric handbook for the average person. Part II describes 177 classroom games and activities for students in the lower grades, upper grades, and secondary level.

Hirsch, S. Carl. *Meter Means Measure*. New York: Viking, 1973. Gr. 4-Adult. (\$4.95)  
Story of the metric system presented in an illuminating and interesting manner.

Holmberg, Verda. *The Metric System of Measurement*. Hayward, California: Activity Resources, 1973. Gr. 4-8. (\$4.50)

A workbook of student activities with experiences in linear measurement, area, volume, weight, and temperature. Illustrations are good, directions are simple, and the activities range from easy to more difficult.

*International (SI) Metric System and How It Works*. Tarzana, Calif.: Polymetric Services, Inc., 1973. Gr. 6-Adult. (\$12.95)

Designed as a text and reference guide. Includes material from many sources that updates the old European metric system and provides details of the unified international approved system now used by the metric world.

*Introducing the Metric System*. Chicago: Cronet Instructional Films, n.d. Grades 6-9. (1 copy, \$1.50; classroom set of 25 copies, \$30)  
A programmed learning text.

Johnson, Dale M., and Van Osdol, Bob. *Handbook for Metric Conversion*. Moscow, Idaho: Idaho Research Foundation, 1973. (\$4.25)

A complete metric conversion guide for the student, salesman, housewife and man-on-the-street. Numerous conversion problems to supplement the concise explanations.

Jones, Daisy M. *How to Read Mathematics: From Lions to Legends*. New York: Harper, 1973. Gr. 4-8. (Paper \$0.78)

Although this is not a mathematics book per se, about 75 percent of it deals with the metric system. Both the reading techniques and mathematical development are sound.

Kelly, Gerald. *Metric System Simplified*. New York: Sterling, 1973. (\$3.99)

Kempf, Albert, and Richards, Thomas. *Exploring the Metric System*. River Forest, Ill.: Laidlaw Brothers, A Division of Doubleday, n.d. (\$0.48)

Kempf, Albert, and Richards, Thomas. *Using the Metric System*. River Forest, Ill.: Laidlaw Brothers, A Division of Doubleday, n.d. (\$0.54)

Lange, Ernst, and others. *Information on the Metric System and Related Fields*. 6th edition. George C. Marshall Space Flight Center, Alabama: NASA, 1974. Adult. (\$2.25)

Includes references to books, reports, and pamphlets; periodicals; metric legislation; media, sources for tools, instruments, components, etc.; and consultants. Order from: Metric Association.

Massey, Opal. *Metrics For Home Use*. Stockton, California: Willow House, 1974. Gr. 7-Adult. (\$2.50)

Provides reassurance that the change to metric need not be traumatic. Gives tables of equivalency for use in sewing, cooking, and home decorating.

May, Lola J. *Measure Metric Book A. Workbook*. New York: Harcourt, 1974. Gr. 3. (\$1.44)

A workbook for early experiences in measuring recommended by the publishers for primary grades.

May, Lola J. *Measure Metric Book B. Workbook*. New York: Harcourt, 1974. Gr. 3-4. (\$1.44)

The handy punch-outs provide the needed tools; the workbook provides the experiences in linear measuring, approximation, and relationships among the units.

May, Lola J. *Measure Metric Book C. Workbook*. New York: Harcourt, 1974. Gr. 5-6. (\$1.44)

This workbook covers linear measure, volume, area, perimeter, and weight. Punch-out cubes and a centimeter ruler are included. Other fun activities are suggested for students to enjoy.

May, Lola J. *Measure Metric Book D. Workbook*. New York: Harcourt, 1974. Gr. 7-12. (\$1.44)

Starting with centimeters, then meters, this workbook gives practice converting to larger and smaller units. It takes up displacement and mass and weight.

*Metric Is Coming*. Washington, D. C., National Science Teachers Association, 1973. (\$0.75)

An instructional aid that explains the metric system for teachers and provides introductory activities for students in elementary and junior high school.

*Metric Manual*. Neenah, Wisconsin: J. J. Keller, 1974. Adult. (\$25.00)

Deals with all essential metric data relative to the U. S. conversion process. Includes U. S. conversion considerations, metric charts and illustrations, advance planning calendar, plus standards and measurement comparisons.

*Metric Measurement, Activities and Bulletin Boards*. Instructor, n.d. Gr. 4-8. (booklet, \$1.50)

Includes activities for length, area, weight and volume measurement in the form of background information, metric measurement vocabulary, units and their relationships, and bulletin board activities.

*Metric Package*. New York: American National Standards Institute, n.d. (\$5.50)

Includes the following:

*American National Standard Metric Practice Guide*. (\$1.50)

*Antitrust Implications of Metric Conversion*. (\$2.00)

*Bibliography of Metric Standards*. (Free)

*Guide to Impact of Metric Use on Standards Development in Companies, Trade Associations, Technical & Professional Societies*. (\$1.00)

*ISO Standard 1000-1973, SI Units and Recommendations for the Use of Their Multiples and of Certain Other Units*. (\$1.50)

*Measuring Systems and Standards Organization*. (\$1.25)

*Orientation for Company Metric Studies - Mechanical Products*. 2nd edition. 1970. (\$1.00)

*Metric Supplement to Science and Mathematics*. Boulder, Colo.: Metric Association, n.d. (1 copy, \$1.25; pkg. of 10, \$7.50)

Booklet that provides a series of practical problems in the application of the metric system. Order from Ideal School Supply Company.

*The Metric System and SI - Measurements and Systems of Units*. Skokie, Ill.: Sargent-Welch

Scientific Company, n.d. (pkg. of 10, \$15; pkg. of 20, \$25; pkg. of 30, \$30; answer booklet, \$1.50)

A comprehensive treatment of the origins and history of measurement, bases of the English system, the metric system and the International System of Units (SI). May be used as a study text for classes learning the metric system in upper elementary grades, junior high school, high school or junior college.

*Metric System Guide: Legislation and Regulatory Controls — Federal and All States.* Neenah, Wis.: J. J. Keller, 1974. Adult. (\$59.00)

Presents legislative and regulatory status of the metric system, nationally and internationally. Includes international treaties, agreements, organizations, development of the SI, status of metric in the U. S., and a comprehensive glossary.

*Metric System Guide: Metric Units — Comparisons, Factors, Tables.* Neenah, Wis.: J. J. Keller, 1974. Adult. (\$59.00)

Presents digital comparisons of metric and customary units of measure. Includes tabular comparisons of the basic metric units for length and mass, of some derived units, and conversion factors for the basic units.

*Metric System Guide: Metrication in the United States, Orientation and Structure.* Neenah, Wis.: J. J. Keller, 1973. (\$59.00)

Loose-leaf binder containing basic background information on metrication in the United States. Updated by *Quarterly Supplementation*. (\$10.00 per quarter)

*Metric System Guide: Reference Sources.* Neenah, Wis.: J. J. Keller, 1974. Adult. (\$59.00)

Comprehensive bibliography of metric-related reference materials covering all aspects of the SI and the forthcoming U. S. conversion. All entries are cross-referenced under author, title, and subjects and include brief descriptions.

*Metric Units of Measure Book.* Boulder, Colo.: Metric Association, n.d. (1 copy, \$0.40; pkg. of 10, \$3.50)

Booklet explains the history and uses of the metric system. Order from Ideal School Supply Company.

*Metrication Handbook.* Neenah, Wis.: J. J. Keller, 1974. Adult. (\$15.00)

Designed to help all individuals solve daily metric problems. Graphically illustrated throughout with an explanation of basic units and their correct usage. Features history, development, chronology, and conversion considerations.

*Metrics, An Introduction To The Metric System.* Chicago: Educational Teaching Aids, 1973. Adult. (\$3.50)

A teacher's resource book giving background and ideas for math centers, bulletin boards, lessons, and suggestions for teaching devices.

Miller, David M. *Understanding the Metric System.* Rockleigh, N.J.: Allyn, 1973. (\$1.80)  
A programmed text.

Minneapolis Public Schools. *Metric Measurement.* Minneapolis: Minneapolis Public Schools, 1972. Gr. 4-8. (10 for \$6.00)

Presents many opportunities to measure and draw lengths in centimeters and millimeters. Conversion is within the metric system only.

Moore, William. *Metric is Here!* New York: Putnam, 1974. Jr. High — Adult. (\$5.95)

Traces development of reproducible standard of measurement to the adoption of the international metric standard. Discusses why the U.S. has not gone to metric and explores the planning and public education efforts necessary for a smooth change.

Parks, E. B. *Insight into Metric Measurement.* San Jose, California: Parks and Math Co., 1973. Gr. 4-12. (1 copy, \$2.00, 1 doz. copies \$22.00)

Self-teaching workbook which deals with metric measurement, geometry, and metric terminology.

Parks, E. B. *Math Dictionary with Metric Emphasis.* San Jose, California: Parks and Math Co., 1973. Gr. 4-12. (1 copy \$4.00, 1 doz. copies \$42.00)

Contains modern math and metric words and deals with general concepts that students have difficulty understanding. Also metric conversion tables.

Parks, E. B. *Math with Metric Skill-building*. San Jose, California: Parks and Math Co., 1973.

(1 copy \$2.00, 1 doz. copies \$22.00)

Self-teaching workbook that deals with logical thinking and math words, their meaning and usages. Has a section of metric problem-solving activities.

Parks, E. B. *Measuring a la Metric*. San Jose, California: Parks and Math Co., 1973. Gr. 4-12. (1 copy \$4.00, 1 doz. copies \$42.00)

Provides basic understanding of the metric system and includes exercises in addition, subtraction, multiplication, and division. Each page is a self-teaching lesson.

Ploutz, Paul F. *The Metric System; a Programmed Approach*. Columbus: Merrill, 1972. Jr.-Sr. High. (\$2.95)

Field-tested text for class or individual use. Extensive problems and self-tests throughout. Fourteen versions of a proficiency test are available for determining pupil progress.

*Reference Manual-Metrication*. Prepared by Hanley L. Riess. TAD Products. n.d. College - Adult. Seminar manual, No. 25-9237. (\$9.50)

Seminar material discusses techniques for a smooth transition to the metric system including what, when, where, and how to convert.

Richardson, Toni. *Making Metric Maneuvers*. Hayward, California: Activity Resources, 1974. Gr. 3-6. (\$5.00)

Nearly 100 different games and activities requiring physical involvement, e.g., races, walking, measuring actual distances and objects. An excellent resource for classrooms having learning centers.

Rinehart, Charles. "*Halve Your Meter*" (words and music). Indiana, Pennsylvania: School Science and Mathematics Association, 1974.

Free reprint of article that appeared in the May, 1973, issue of *School Science and Mathematics* by sending a stamped, self-addressed envelope.

Robinson, John E. *How Could You Possibly Live With the Metric System*. Orange, California: Human Design Advocates, n.d. (\$4.25)

Written from a human factors viewpoint.

Ronningen, Helmer A. *Metrics: Measurement for Tomorrow*. Riverside, N.J.: Macmillan, 1972. (\$1.50)

Ross, Frank. *The Metric System: Measures for all Mankind*. New York: S. G. Phillips, 1974. Jr.-Sr. High. (\$8.95)

Traces the history of weights and measures emphasizing the metric and British systems. Discusses the likelihood of U.S. adoption of the metric system.

Schools Council for Curriculum and Examinations. *Metres, Litres and Grams: Introducing Metrication in the Primary School*. New York: Scholastic Book Services, 1971. (\$2.70)

Guidance booklet for teachers to introduce metric units of measurement in the primary school. Offers varied and interesting activities.

Sellers, Robert C. *Basic Training Guide to the New Metrics*. Washington, D.C.: National Tool, Die and Precision Machining Association, n.d. (\$4.95)

Smart, James R. *Metric Math: The Modernized Metric System*. Monterey, California: Brooks/Cole, 1974. Adult (Paperback, \$3.50)

Resource book for teachers covering units of length, measures of area and volume, units of mass, and additional units. Contains exercise sets and laboratory activities for senior high students.

*Teaching the Metric System*. Chicago: Weber Costello, 1974. Adult. (\$1.50)

While the activities described may not be as creative as in other books, the outline is very good. A creative teacher can adapt the activities to her students. Permission is granted to duplicate the activity sheets.

*Think Metric* Hyattsville, Md.: National Education Association, n.d. (30 copies, \$2.25)

Turner, Rufus P. *Metrics for the Millions*. Indianapolis: H. W. Sams, 1974. Sr. High — Adult. (\$3.50)

Gives historical background of the U.S. and metric units and very complete tables of conversion factors. Includes practice exercises with answers. Useful reference manual.

Vickers, J. S. *Making the Most of Metrication*. Boston: Cahners, 1969. (\$10.95)

Vogel, Christine N. *How to . . . Convert the Metric System Into the U.S. System and Vice Versa*.

Bellevue, Wash.: C. N. Vogel, 1973. (\$3.95)

Willert, Frederic, *My Metric Measurement Manual*. Two Rivers, Wis.: Pauper Press, 1973. (Teacher edition, \$2.50; Student edition, \$1.50)

With a fantasy story, guides the reader by the discovery method through the basics of linear measurement.

## PERIODICALS

*American Metric Journal*. Tarzana, California: AMJ Pub. Co., Bi-monthly. Adult. (\$35.00/year)

Features articles from leading industrial firms that are converting to the metric system. Training and educational material is also published, emanating from universities and schools having outstanding metric programs.

*Metric Association Newsletter*. Boulder, Colorado: Metric Association, Quarterly. Adult. (\$3.00/year)

Contains news in the field of metrics and the association's activities. Lists new materials and developments.

*Metric News*. Roscoe, Illinois: Swani Pub. Co., Bi-monthly. Adult. (\$5.00 for 6 issues)

Includes news and opinions about metrication and also discusses new products for use in industry and for teaching.

*Metric System Guide Bulletin Service*. Neenah, Wis.: J. J. Keller. Monthly. (\$5.00 per month)

Provides current information, including new developments affecting the educational community and the availability of metric-related educational aids and materials.

## DUPLICATING MASTERS

*Metric Area II*. Skokie, Illinois: National Textbook Co., 1973. Gr. 4-7. (\$6.50)

Teaches areas by covering square centimeters with Cuisenaire cubes and then counting the cubes and progresses to laying a centimeter grid over figures and counting squares.

*Metric Length I*. Skokie, Illinois: National Textbook Co., 1973. Gr. 3-up. (\$6.50)

Beginning with arbitrary units, these activity sheets move into measuring centimeters and decimeters with Cuisenaire rods, providing practice in changing units within the metric system.

*Metric Masters, Book One*. Instructional Fair, 1973. Gr. 5-8. (book of duplicating masters, \$4.95)

Designed to help children understand our conversion to the metric system.

*Metric Volume III*. Skokie, Illinois: National Textbook Co., 1973. Gr. 4-up. (\$6.50)

A nice review of perimeter and area is given before introducing volume. Cuisenaire rods are used to compute volume.

*Metrication Masters*. Chicago: Holt, Rinehart & Winston, 1974. Gr. 4-8. (Pad of 50 masters, \$19.98)

Each master is a complete lesson, based on the "guided discovery" approach. Application exercises are included for practice of metrication in realistic situations. Units on length, capacity, mass, weight, area, volume, and temperature.

*Practice in the Metric System*. Instructor, 1973. Gr. 4-8. (book of duplicating masters, No. 843, \$3.95)

Open-end exercises dealing with prefixes, length, weight, capacity, metric area, and volume.

*Working with Color Rods in Metric*. Skokie, Illinois: National Textbook Co., 1973. Gr. 2-3. (\$6.50)

Non-standard units, color rods, inches, and centimeters are used for measuring " " , estimation included. Changing from centimeters to decimeters is well covered and elements the basic textbooks nicely.

## UNITED STATES GOVERNMENT DOCUMENTS

The following publications are available from the United States Superintendent of Documents. Order by the given SD catalog number from:

Superintendent of Documents  
U.S. Government Printing Office  
Washington, D.C. 20402

"Brief History and Use of English and Metric Systems of Measurement With a Chart of Modernized Metric System." (revised, 1970), SD Cat. No. C13. 10:304A. (\$25)

Chisom, L. J. *Units of Weight and Measures: International Metric and U.S. Customary Definitions and Tables of Equivalents*. National Bureau of Standards Miscellaneous Publication 286, SD Cat. No. 12. 10:286. (\$2.25)

National Bureau of Standards. "All You Will Need to Know About Metric." (information sheet) Metric Information Office, National Bureau of Standards, Washington, D.C. 20234.

National Bureau of Standards. *A Metric America: A Decision Whose Time Has Come*. (July, 1971), Gr. 7-Adult. SD Cat. No. C13. 10:345. (\$2.25)

National Bureau of Standards. "Metric Conversion Card." Special Publication (July, 1972), SD Cat. No. C13. 10:365. (\$.20)

National Bureau of Standards. "Modernized Metric Systems Wall Chart." Special Publication 304, SD Cat. No. C13. 10:304. (\$.55)

National Bureau of Standards. "Some References on Metric Information." (1973), SD Cat. No. 13. 10:389. (\$.25)

A handy quick-reference, it lists information sources and metric publications available from federal agencies. There is a list of publishers who market metric materials for educators (books, films, kits, etc.). Contains a metric conversion chart and a summary of basic facts about the metric system.

National Bureau of Standards. "What About Metric?" Stock No. 0803-01191. (\$.80)

Robinson, B. D. *Education*. (An Interim Report of the U.S. Metric Study). National Bureau of Standards. Special Publication 345-6 (July, 1971), SD Cat. No. C13. 10:345-6. (\$1.25)

Senate Commerce Committee. *Metric Conversion*. (1972), SD Cat. No. Y4. C73/2:92-(64). (\$1.25)

Treat, C. F. *A History of the Metric Controversy in the United States*. (An Interim Report of the U.S. Metric Study). National Bureau of Standards. Special Publication 345-10 (August, 1971), SD Cat. No. C13. 10:345-10. (\$2.25)

## ADDRESSES OF PUBLISHERS

AHEA Sales Office (American Home Economics Assn.)  
2010 Massachusetts Ave. N.W.  
Washington, D.C. 20036

AMJ Publishing Company  
Drawer L  
Tarzana, Calif. 91356

Activity Resources Company  
P.O. Box 4875  
Hayward, Calif. 94545

Allyn & Bacon, Inc.  
470 Atlantic Ave.  
Boston, Mass. 02210

American National Standards Institute  
1430 Broadway  
New York, N.Y. 10018

Behavioral Research Laboratory  
Box 577  
Palo Alto, Calif. 94302

Brooks/Cole Publishing Co.  
540 Abrego St.  
Monterey, Calif. 93940

Cahners Publishing Co., Inc.  
89 Franklin St.  
Boston, Mass. 02116

Coronet Instructional Films  
65 E. South Water St.  
Chicago, Ill. 60601

Weber Costello Co.  
1900 N. Narragansett Ave.  
Chicago, Ill. 60639

Creative Sights & Sounds  
c/o Peter LI, Inc.  
2451 E. River Rd., Suite 200  
Dayton, Ohio 45439

Thomas Y. Crowell Co.  
666 Fifth Ave.  
New York, N.Y. 10019

Doubleday and Co., Inc.  
Garden City, N.Y. 11530

Educational Teaching Aids  
159 Kinzie Street  
Chicago, Ill. 60610

Anton Glaser  
1237 Whitney Rd.  
Southampton, Pa. 18966

Graphics Art Research Center  
Rochester Institute of Technology  
Rochester, N.Y. 14623

Harcourt, Brace, Jovanovich  
757 Third Ave.  
New York, N.Y. 10017

Harper & Row  
49 E. 33rd St.  
New York, N.Y. 10016

Holt, Rinehart & Winston  
625 North Michigan Ave.  
Chicago, Ill. 60611

Houghton Mifflin  
Regional Sales Office  
1900 South Batavia Ave.  
Geneva, Ill. 60134

Human Design Advocates  
Box 6309  
Orange, Calif. 92667

Idaho Research Foundation  
University Station Box 3367  
Moscow, Idaho 83843

Ideal School Supply Co.  
11000 South Laverne Ave.  
Oak Lawn, Ill. 60453

Instructional Fair, Inc.  
1225 Bowers St.  
Birmingham, Mich. 48012

Instructor Publications, Inc.  
7 Bank St.  
Dansville, N.Y. 14437

J. J. Keller  
145 W. Wisconsin Ave.  
Neenah, Wis. 54956

Laidlaw Brothers  
A Division of Doubleday  
Thatcher and Madison  
River Forest, Ill. 60305

Lerner Publications Co.  
241 First Ave., North  
Minneapolis, Minn. 55401

McGraw-Hill Book Co.  
1221 Ave. of the Americas  
New York, N.Y. 10020

Macmillan Publishing Co.  
866 Third Ave.  
New York, N.Y. 10022

Charles E. Merrill Publishing Co.  
1300 Alum Creek Drive  
Columbus, Ohio 43216

Metric Association  
Sugarloaf Star Route  
Boulder, Colorado 80302

Midwest Publications Co.  
Box 129  
1700 W. Maple Road  
Troy, Mich. 48084

Minneapolis Public Schools  
Special School District No. 1  
Minneapolis, Minn. 55413

National Education Association  
P.O. Box 327  
Hyattsville, Md. 20781

National Science Teachers Association  
1201 16th St., NW  
Washington, D.C. 20036

National Textbook Company  
8259 Niles Center Road  
Skokie, Ill 60076

National Tool, Die and Precision Machining Assn.  
9300 Livingston Road  
Washington, D.C. 20022

Thomas Nelson, Inc.  
30 East 42nd St.  
New York, N.Y. 10017

Orange County Dept. of Education  
Box 11846  
Santa Ana, Calif. 92711

Parks and Math Co.  
954 Idlewood Drive  
San Jose, Calif. 95121

Pauper Press  
Box 303  
Two Rivers, Wis. 54241

Pendragon House  
220 University Ave.  
Palo Alto, Calif. 94301

S. G. Phillips, Inc.  
305 W. 86th St.  
New York, N.Y. 10024

Polymetric Services, Inc.  
P.O. Drawer "L"  
Tarzana, Calif. 91356

G. P. Putnam's Sons  
200 Madison Ave.  
New York, N.Y. 10016

Random House, Inc.  
201 East 50th St.  
New York, N.Y. 10022

Howard W. Sams & Co.  
4300 W. 62nd St.  
Indianapolis, Indiana 46206

Sargent-Welch Scientific Co.  
7300 N. Linder Ave.  
Skokie, Ill. 60076

School Science and Mathematics Assn.  
P.O. Box 1614  
Indiana University of Pennsylvania  
Indiana, Pa. 15701

Scholastic Book Services  
Division of Scholastic Magazine  
50 W. 44th St.  
New York, N.Y. 10036

Sterling Publishing Co., Inc.  
419 Park Ave., South  
New York, N.Y. 10016

Swani Publishing Co.  
P.O. Box 248  
Roscoe, Ill. 61073

TAD Products  
639 Massachusetts Ave.  
Cambridge, Mass. 02139

Van Nostrand Reinhold Co.  
450 W. 33rd St.  
New York, N.Y. 10001

Viking Press, Inc.  
625 Madison Ave.  
New York, N.Y. 10022

Christine N. Vogel  
Box 103  
Bellevue, Wash. 98009

Weybright and Talley, Inc.  
750 Third Ave.  
New York, N.Y. 10017

John Wiley & Sons, Inc.  
605 Third Ave.  
New York, N.Y. 10016

Willow House Publishers  
111 N. San Joaquin St.  
Stockton, Calif. 95202

## CHARTS

### *Classroom Metric Lines* (GR 4-8)

Includes metric line measurement charts drawn to a common one-meter length to illustrate basic linear units. Four compare American units to metric units, four display the meter and its divisions. Instructor. 1972.

(set of 8 charts, No. 735, \$3.50)

### *Decimal Lines* (GR 4-8)

Eight separate 37" x 6¼" lines graphically present decimals and common fractions. Helpful in computational work in the four basic processes, for comparing like and unlike, and concepts of "greater than" and "less than." Instructor. 1972.

(chart No. 734, \$3.75)

### *Deluxe Cook 'N Sew English-Metric Calculator* (GR 7-ADULT)

Facilitates the conversion calculations encountered in the English to metric transitional period in grocery shopping, decorating, and the use of cookbooks and dress patterns. Union Carbide.

(1 chart, \$2.50)

### *Dualpak Metric Wall Chart* (JR. HIGH-ADULT)

The United States inch/pound system is compared to the international metric (SI) system in everyday language. Seven of the basic metric units are defined, common measuring units and conversion information are presented. Polymetric Services. Titles included: U.S. Customary Measure and the Modern International Metric System; The Seven Basic Metric Units of Measure.

(2 charts, C1 & C2, \$5.95)

### *English-Metric Conversion Calculator* (GR 7-ADULT)

Converts temperature, liquid, weight, linear, square, and cubic measurements. Union Carbide. 1972.

(5" x 10" chart, \$2.50)

### *A History of Measurement* (GR 3-8)

Pictorial sequence, with captions, traces historical development of our system of linear measurement. Ford Motor Company. Free.

### *Measurement Chart*

Size 54" x 44" In Color. Traces the development of units like foot, yard, mile, and pound. Metric system is presented graphically, as is the scientific system of notation, by powers of 10. Denoyer-Geppert. 1964.

(No. 42186 on spring roller, steel board, cover, \$15)

(No. 42186 wood rods, top and bottom, \$9.50)

### *Metric Measure Wall Charts* (GR 7-ADULT)

Includes basic units, prefixes for base units, cooking measure equivalents, and illustrated conversions of length, area, and volume. Union Carbide.

(2 charts, \$3.50)

### *Metric Place Value Chart* (GR 5-10)

Shows decimal point relationships and the meaning of meter, liter, and gram. Ideal. n.d.

(chart No. 7777. \$2.80)

### *The Metric System* (GR 4-8)

Topics include: metric system, prefixes, metric units, metric weight, metric capacity, metric length, meter, centimeter, kilometer, gram, kilogram, and liter. Included also is a table of conversion. Instructor. 1973.

(Set of 12 charts, No. 523, \$3.50)

### *Metric System Chart*

Size 46" x 29." Printed in colors. Explains by illustration, text, and tables the comparison of the internationally accepted metric system of measurement and the American system. Denoyer-Geppert.

(No. 420712-14 on spring roller, steel board, cover, \$14.25)

(No. 420712-10 wood rods, top and bottom, \$10.50)

### *Metric System Charts (GR 7-12)*

Set of 3 charts, 23" x 29," in full color, with large type. Creative Visuals. 1974.

(No. C-MGB-4, \$7.50)

### *Metric System Study Prints*

10 full-color, 33 cm x 46 cm (13" x 18") prints covering currency, length, area, volume, capacity, mass, weight, time, work and energy, and power. Teacher's Guide. E. M. Hale, 1973. (set of 10 prints, \$14.95)

### *Metric Wall Chart (GR 10-ADULT)*

Compares English and metric measurements of length, area, volume, mass, and capacity. Also includes summary of prefixes and a table of common equivalents and conversions. TAD Products. (28" x 42" chart, No. 25-9238, \$3.75)

### *Wall Chart Conversion Tables (GR 9-ADULT)*

Explains conversion factors involving measurement terms most commonly used in schools and industry. TAD Products.

(set of 2 charts, No. 25-9239, \$7.25)

## **8mm FILMS**

### *Discover — Why Metric*

Metric Mike, the central character, provides the basic principles needed to understand the metric system. Swani Division of Regal-Beloit Corp., 1972

(Super 8, col., \$115)

### *How To Use a Metric Ruler (GR 1-6)*

Emphasizes relationships of millimeters and centimeters to the meter. Visual Ed. Consult.

(Super 8 Tech., col. cap. loop, \$8)

(Super 8 Kodak, col. cap. loop, \$8)

### *Linear Measurement: Meter Stick (GR 9-12)*

Universal Ed. n.d.

(Super 8 Tech., col. loop, \$22)

(Super 8 Kodak, col. loop, \$22)

(Standard 8mm, \$22)

### *Mass Measurement: Metric System (GR 9-12)*

Universal Ed. n.d.

(Super 8 Tech., col. loop, \$22)

(Super 8 Kodak, col. loop, \$22)

(Standard 8mm, \$22)

### *Metric Measure Relationships (GR 9-12)*

Universal Ed. 1973.

(Super 8 Tech., col. loop, No. 6489, \$22)

(Super 8 Kodak, col. loop, No. 6489, \$22)

(Standard 8mm, No. 6489, \$22)

*Metric System (GR 7-12)*

Kavic House.

(9 Super 8 Tech., col. loops, \$216)

(9 Super 8 Kodak, col. loops, \$216)

(Standard 8mm, \$24 each)

*The Metric System (GR 1-6)*

Sterling. n.d. Titles include: "Why is it a Better System," NO. S-283-C; "Measuring with the Metric System," No. S-283-D; "Metric Units of Volume," No. S-284E.

(Super 8 Tech., col. loops, \$22 each)

*Metric System: Decimal Calculating (GR 7-12)*

Shows how the decimal system is based on 10 and its multiples. Using money as the illustration, shows how decimals are easier to use than fractions in calculating. Visual Instruction.

(Super 8 Tech., loop, SMC 9C, \$20)

(Super 8 Kodak, loop, SMC 9C, \$21)

(3/4 Umatic video tape cassette, \$20)

*Metric System: English & Metric Lengths (GR 7-12)*

English and Metric lengths are compared — the yard versus the meter, inches versus centimeters, and miles versus kilometers. Visual Instruction.

(Super 8 Tech., loop, SMS 90, \$20)

(Super 8 Kodak, loop, SMS 90, \$21)

(3/4 Umatic video tape cassette, \$20)

*Metric System: English & Metric Weight & Volume (GR 7-12)*

English and metric weights and volumes are shown and compared — the pound versus the kilogram, the ounce versus the gram, and the quart versus the liter. Visual Instruction. 1972.

(Super 8 Tech., loop, SMS 9E, \$20)

(Super 8 Kodak, loop, SMS 9E, \$21)

(3/4 Umatic video tape cassette, \$20)

*Metric System Film Loops (GR 3-8)*

Colorful cartoon creatures introduce metric concepts of measurement. Houghton Mifflin. 1974. Titles include: Measuring Length; Meters/Centimeters; Area; Volume and Capacity; Place Value and the Metric System; Weight.

(Set of 6 film loops, worksheets, guide, \$165.00)

(Individual film loops, \$27.00 each)

*Metric System: History of Measurement (GR 7-12)*

The history and evolution of measurement from ancient times up to the modern metric system is described. The need for a universally-accepted measuring system is shown. Visual Instruction. 1972.

(Super 8 Tech., loop, SMS, 9A, \$20)

(Super 8 Kodak, Loop, SMS, 9A, \$21)

(3/4 Umatic video tape cassette, \$20)

*Metric System: Its Advantages (GR 7-12)*

Illustrates basic units for length, mass and volume, and some of the prefixes for multiples and sub-multiples for all metric units. Visual Instruction. 1972.

(Super 8 Tech., loop, \$20)

(Super 8 Kodak, loop, \$21)

(3/4 Umatic video tape cassette, \$20)

*Metric System: Long Lengths (GR 7-12)*

Metric long length measurements are shown. Examples given are map reading and space exploration. Prefixes for large multiples of lengths are shown and defined. Visual Instruction. 1972.

(Super 8 Tech., loop, \$20)

(Super 8 Kodak, loop, \$21)

(3/4 Umatic video tape cassette, \$20)

*Metric System: Review & Test – General Use (GR 7-12)*

Shows various metric measurements in everyday use. Asks viewer to name the basic metric unit of measurement in each instance, then gives each answer in turn. Visual Instruction. 1972.  
(Super 8 Tech., loop, \$20)  
(Super 8 Kodak, loop, \$21)  
(3/4 Umatic video tape cassette, \$20)

*Metric System: Review & Test – Units & Readings (GR 7-12)*

Asks viewer to name various basic metric units. Viewer is asked to identify several metric measurements. Film allows about 5 seconds for viewer to answer, then it gives each answer in turn. Visual Instruction. 1972.  
(Super 8 Tech., loop, \$20)  
(Super 8 Kodak, loop, \$21)  
(3/4 Umatic video tape cassette, \$20)

*Metric System: Short Lengths (GR 7-12)*

The meter and its division of decimeters, centimeters and millimeters are explained. A woodworking plan is shown and a metric length is measured and marked according to that plan. Visual Instruction. 1972.  
(Super 8 Tech., loop, \$20)  
(Super 8 Kodak, loop, \$21)  
(3/4 Umatic video tape cassette, \$20)

*Metric System: Volume (GR 7-12)*

The cubic length basis for metric volume is shown and the liter (cubic decimeter) is defined. One liter is shown to be about four cupsful. 800 milliliters are measured for a metric formula. Visual Instruction. 1972.  
(Super 8 Tech, loop, \$20)  
(Super 8 Kodak, loop, \$21)  
(3/4 Umatic video tape cassette, \$20)

*Metric System: Weight (GR 7-12)*

A mass of water-equivalent to the basic unit of one kilogram is weighed. Uses of metric mass in recipes and medicines are shown. A chemical formula calls for 8.2 grams which is weighed on a pan balance. Visual Instruction. 1972.  
(Super 8 Tech., loop, \$20)

*Metric System of Measurements*

ESB-Edcomb.

(11 Super 8 loops, \$20 each)

*Understanding Measurement (GR 1-5)*

Shows that any unit can be used for measuring as long as it does not change length. Rulers, lollipops, even people are devices for measuring. A good presentation of the reason for measuring. Troll. 1973.  
(1 Super 8 Tech., Loop, \$24.95)

*Understanding Weight and Mass (GR 6-12)*

Illustrates the difference between weight and mass. Some visuals are hard to relate to the content being taught, but the film is generally well done. Some of the examples used to illustrate concepts cannot be set up in a classroom situation. Troll. 1973.  
(1 Super 8 Tech., loop, \$24.95)

*Weighing and Measuring (GR 1-6)*

Kavic House.

(3 Standard 8mm, \$24.00 each)

## 16mm FILMS

### *Discover . . . Why Metric* (PRIMARY – ADULT)

Metric Mike, the central cartoon character, provides the basic principles needed to understand the metric system. Swani Division of Regal-Beloit, 1972.  
(14 min., col., \$195)

### *International System of Units* (JR. – SR. HIGH SCHOOL)

Helps establish the fundamental variables of physical science, including measurements of length, mass, temperature and time. Discusses metrics, conversion and the value of measuring methodology. King Screen Productions, 1970.  
(21 min., col., \$250)

### *Learning About Metric Measures* (PRIMARY – JR. HIGH SCHOOL)

Introduces basic concepts. Identifies and defines the units of the meter stick. Uses the terms decimeter, centimeter, millimeter and meter. Shows the relationship of the metric and decimal systems. BFA Educational Media, 1970.  
(16 min., col., \$215)  
(Rental, \$8)

### *Measuring: A Way of Comparing* (GR 1-3)

Identifies simple measurements and establishes the relationship between them. Shows how we use units of measurement to compare items. BFA Educational Media, 1967.  
(9 min., col., \$125)  
(Rental, \$6.50)

### *Meter, Liter and Gram* (INTERMEDIATE – HIGH SCHOOL)

Introduces the three basic units of the metric system. Show how other units are derived from these three basic units. BFA Educational Media, 1970.  
(13 min., col., \$170)  
(Rental, \$8)

### *A Metric America* (JR. HIGH – ADULT)

An animated parable of imaginary people called "Wimples" and the difficulties they experience with their cumbersome measuring system. Gives reasons for U.S. adoption of metric and introduces the meter, liter, kilogram, and celsius. AIMS, 1973.  
(16 min., col., Code No. 9345, \$230)  
(Rental, \$30)

### *The Metric Film* (JR. HIGH – ADULT)

Traces metric system from its inception to the present day, along with reasons for converting to it. Good introductory film, accompanied by a detailed study guide. American Educational Films, 1974.  
(13 min., col., \$220)  
(Rental, \$25.00)

### *Metric Measure Made Easy* (GR 1-8)

New version of *A Metric America*. Narrator accompanies himself on guitar, using relaxed country-western delivery. Close attention is paid to the process of measurement using meters, liters, kilograms, and celsius. Decimal nature is stressed. AIMS, 1974.  
(14 min., col., Code No. 9413, \$210)  
(Rental, \$20)

### *Metric Measurement, Film 1* (PRIMARY)

Presents how measurement helps us in our daily lives and the importance of using a standard unit of measurement that will be the same for everyone. Shows how the Metric System of Measurement uses our base ten counting system and helps us measure such things as the length of our step, or the distance we walk to school, the weight of a penny, or how much we weigh on a scale. Journal Films, Inc.  
(13½ min., col., \$175)

*Metric Measurement, Film 2* (INTERMEDIATE)

Compares each unit of the metric system, and its multiples and divisions, to familiar objects and situations, such as the meter to the length of your step, the kilometer to city blocks and the distance to the moon, the gram to the weight of an egg shell. We see how the base ten counting system and decimal equivalents help us relate kilometers to millimeters. We also discover the relationship of the gram and the liter to the metric system, and we review the celsius thermometer readings. Journal Films, Inc.

(13½ min., col., \$175)

*The Metric System* (INTERMEDIATE – JR. HIGH SCHOOL)

Animated presentation. From the Mathematical Relationship Series. NBC Educational Enterprises. 1971.

(13 min., col., \$180)

*The Metric System, Parts I & II*

Part I covers the history, advantages, and decimal calculating of the metric system. Compares English and metric. Part II includes short and long lengths and weight and volume. Visual Instruction Productions.

(12 min., col., \$150 each)

*The Metric System Series*

Sterling, 1970.

*What Is Measurement?* (INTERMEDIATE)

Discusses need for units of measurement and the desirability of a standard universal system like the metric system.

*Area and Volume Measure* (INTERMEDIATE – JR. HIGH)

Considers the multitude of different units of measure we use, the difficulties this causes and presents the metric system as way to end the problem.

*Linear Measure* (INTERMEDIATE – JR. HIGH)

Discusses the shape of the earth and suggests using the earth as a standard for linear measure.

*Weighing and Measuring* (INTERMEDIATE)

Discusses the common English system of weighing and introduces the metric system.

(4 films – 10 min., col., \$165 each)

*Metrics for Elementary Series*

Oxford Films. 1974. Titles: "Length and Distance;" "Volume and Capacity;" "Weight and Mass." (3 films – 10 min., col., \$140 each)

*Story of Weights and Measures* (JR. HIGH)

A humorous journey through history in delightful animation explores how units were used to measure and how they have become standardized. Illustrates how units were organized into systems of measurement and reveals some of the advantages of using the metric system. Coronet.

(10½ min., col. No. 3448, \$148).

*Think Metric* (PRIMARY – INTERMEDIATE)

Series of three motivational films that introduce the concept of measuring. A blend of everyday activities, simple narration and original music and song stimulate student discovery and provide a knowledge of the basic units of metric measure. Barr Films. 1974. Titles: Measure Length; Measure Weight; Measure Volume.

(Each film 9 min., col., \$135)

(Special price for series of 3, \$375)

(Rental, \$10 each)

*Think Metric!* (Second edition of *The Metric System*) (INTERMEDIATE – JR. HIGH)

Simulated televised coverage of *The Metric Games* humorously introduces the metric system. In an Olympic-type setting, the competition includes many examples of measuring and weighing with metric units. Familiar lengths, distances, capacities and temperatures are presented in metric terms to help us "think metric." Coronet. 1974.

(14 min., col., No. 3503, \$192)

## FILMSTRIPS

### *English or Metric? That is the Question* (INTERMEDIATE – JR. HIGH)

The series traces the historical backgrounds of both the English and the metric systems and clearly points out the advantages and disadvantages of both. Students will learn how the metric system works, the problems inherent in conversion and the ultimate economic advantage of increased foreign trade after conversion. Clearvue. 1973. Titles: "History of the English System;" "History of the Metric System;" "Characteristics of the Metric System;" "Why Go Metric?"

(4 filmstrips, 2 records, teacher's guide, No. CL550-SAR, \$36.50)

(4 filmstrips, 2 cassettes, teacher's guide, No. CL550-SATC, \$40.50)

### *How to Read a Ruler-Metric System* GR 7-12)

Creative Visuals. 1972.

(1 filmstrip, 1 cassette, No. S1511-FST-36, \$12.50)

(1 filmstrip only, \$7.50)

### *The International System of Units-Metric Units* (JR. HIGH)

The seven basic units of the system are discussed, and a three-step plan for metric conversion is presented. Clearvue. 1973. Titles: "Introduction to the International System of Units;" "Metric Units: Time and Temperature;" "Metric Units: Mass and Its Derivatives;" "Metric Units: Electrical Current, Luminous Intensity, Amount of Substance, and the Plane and Solid Angle"

(set of 4 filmstrips, 2 records, teacher's guide, No. CL550-SBR, \$50)

(set of 4 filmstrips, 2 cassettes, teacher's guide, No. CL550-SBTC, \$54)

### *International Metric System (SI)* (ELEMENTARY – SR. HIGH)

Objective is to teach students to **think metric**, and to develop an understanding of the principles of measurement, comparison, and estimation. Includes activity cards which provide practice for individual, small group or class use. BFA Educational Media. 1974. Titles: "A World System;" "Units of Length;" "Units of Area and Volume;" "Units of Mass"

(4 filmstrips, 4 records, No. VEG000, \$58)

(4 filmstrips, 4 cassettes, No. VEH000, \$66)

(Individual titles, \$5 each)

(Set of activity cards, separate, \$6)

### *Introducing the Metric System* (ELEMENTARY, JR. HIGH, SR. HIGH)

Clearly presented series which illustrates the advantages of the metric system. Bailey Film Associates. 1972. Titles: "The Meaning of Metric;" "Measuring Lengths;" "Units of Volume and Mass;" "Converting to Metric"

(4 filmstrips, 2 records, VT8000, \$58)

(4 filmstrips, 2 cassettes, VT9000, \$66)

### *Learning to Measure in a Metric World* (PRIMARY – INTERMEDIATE)

Introduces the young learner to the concepts of measurement and the metric system. English units are not presented. Eye Gate. 1973. Titles: "Why Do We Measure?" "How Tall, How Far, and How Fast?" "How Much Can It Hold?" "How Much Does It Weigh?"

(set of 4 color filmstrips with 2 cassettes, No. TX462, \$38)

### *Let's Take Measures, For Good Measure*

Includes rhymes, familiar objects, and everyday situations with which the pupils can identify. Teaches that measurement is vital and shows how to use measuring tools. Education Corp. of America. 1974. Titles: "Numbers Are Names;" "Measuring How Far, How Long, How Tall;" "Comparing;" "Metric Terms;" "More Metric Terms"

(5 filmstrips, 5 records, No. R501, \$66.50)

(5 filmstrips, 5 cassettes, No. C501, \$66.50)

### *Let's Talk Metric* (GR 5-7)

A light-hearted look at the history of measurement and life in a metric world. The teacher's manual has 12 overhead transparencies and 30 duplicating masters for exercises in thinking and working in meters. A simple introduction intended to supplement other teaching activities. Multimedia Productions. 1973. Titles: "Measured Confusion;" "Metric Spoken Here."

(2 filmstrips, with records, \$34.50)

(2 filmstrips, with cassettes, \$36.50)

### *Measuring Capacity Series* (INTERMEDIATE)

This series is designed to provide students with a basic understanding of the Avoir du pois system and International System of measuring capacity. Enables students to recognize unit measures, and perform basic computations. Provides experiences that will enable students to make wise decisions as consumers. McGraw-Hill Films. 1974. Titles: "Understanding Capacity;" "Units and Language of Liquid Capacity;" "Units and Language of Dry Capacity;" "Capacity and the Consumer."

(4 filmstrips, 4 records, No. 103460-9, \$58)

(4 filmstrips, 4 cassettes, No. 102355-0, \$66)

### *Measuring the Metric Way* (INTERMEDIATE – JR. HIGH)

This series demonstrates that measuring is merely a means of comparing, and offers the metric system as the simplest and most practical way to compare. Encyclopaedia Britannica. n.d. Titles: The Metric System of Measuring - SI, We Measure Distance, We Measure Mass and Weight, We Measure Volume and Density, We Measure Time.

(set of 5 filmstrips, No. 12640, \$41)

### *Measuring the Metric Way* (PRIMARY)

Combines a perceptivity exercise with a simple lesson in metrical weights and measures. Each activity concludes with an on-screen post test in which the audience must decide with which metric units the pictured objects or animals should be measured. Guidance Associates. 1973.

(2 filmstrips, with records, No. 300 986, \$22.50)

(2 filmstrips, with cassettes, No. 300 994, \$24.50)

### *A Metric America* (JR. HIGH – ADULT)

Covers the major concepts of the metric system. AIMS. 1973. Titles: "The Metric System – Historically Speaking," "Measuring Length Metrically," "Measuring Area Metrically," "Measuring Volume Metrically," "Measuring Weight Metrically," "Measuring Temperature Metrically."

(6 filmstrips with records, No. F1250, \$90)

(6 filmstrips with cassettes, No. F1251, \$102)

### *Metric Package* (Jr. HIGH – ADULT)

Provides explanations of the metric system as it will apply to business and industry. Uniten Systems. 1973. Titles: "Introduction to the Metric System," "Basic and Derived Units," "Linear Measurement and Precision Instruments," "Geometric Dimensioning and Tolerancing," "Science and Metrics – Part I," "Science and Metrics – Part II."

(35mm color slide/cassette – 6-program package, \$325; \$65 each)

(35mm filmstrip/cassette – 6-program package, \$280; \$55 each)

(Sony videocassette – 6-program package, \$850; \$160 each)

### *Metric Series* (Jr. HIGH – ADULT)

Thinking in metric terms – not conversion – is stressed by making SI understandable in relation to common objects, rather than to customary units. Library Filmstrip Center. 1973. Titles: "Survey of Modernized Metric," "SI: Length and Area," "SI: Mass and Volume," "SI: Temperature."

(Each filmstrip, with record, \$21)

(Each filmstrip, with cassette, \$23)

### *The Metric System*

Uses interesting characters, real-life situations and familiar objects. Includes worksheets to give pupils practice. Comprehensive teacher's guide. Education Corp. of America. 1974. Titles: "Measurement," "History of English-American System," "History of Metric System," "Measuring Length and Volume" (English-American), "Measuring Length and Volume" (Metric), "How Does the Metric System Work?" "Advantages of the Metric System."

(7 filmstrips, 7 records, No. R-502, \$93.50)

(7 filmstrips, 7 cassettes, No. R-502, \$93.50)

### *The Metric System (GR 7-12)*

Introduces the metric system, relating metric units to equivalent English units. Correlated with *Using Mathematics*, 9, by Henderson and Pingry. McGraw-Hill.

(1 filmstrip, col., No. 0430, 10-4, \$8.50)

### *The Metric System (GR 4 – JR. HIGH)*

Facts presented in story of 2 boys who discover the metric system when they must repair a French bicycle. Includes detailed guide and list of sources of supplemental materials. McGraw-Hill. Titles: Part 1: Why Have It? – Part 2: How to Use It.

(2 filmstrips, with cassettes, No. 102503-0, \$35)

(2 filmstrips, with records, No. 103826-4, \$31)

### *The Metric System (GR 4-6, and SP. ED. JR. – SR. HIGH)*

Cartoon characters, simple language, and clearly drawn diagrams are used in presentation, with no reference to our present system of measurement. Package consists of filmstrips, cassettes, teacher's guide and student activity books. Media Development. 1973. Titles: Introduction; Vocabulary; The Meter; The Gram; The Liter; Review.

(Elem. Program – MRI – 6 filmstrips, 6 cassettes, 1 guide, 1 250 ml. measure, 30 student activity books, 30 rulers, \$134.50)

(Spec. Ed. Program – MSI – 6 filmstrips, 6 cassettes, 1 guide, 1 250 ml. measure, 16 student activity books, 16 rulers, \$109.50)

(Additional student activity books, \$1.35 ea.)

### *Metric System (ELEMENTARY)*

Explains and discusses the standard unit of measure and decimal relationships within the metric system. Popular Science Pub. Co. 1968.

(1 filmstrip, No. 6H - 9, \$7.50)

### *Metric System (GR 1-6)*

Considers measurement of everyday things. Universal Ed. 1970.

(1 filmstrip, col., No. 17827, \$6)

### *The Metric System (GR 10-ADULT)*

This series is designed for **High School Math** and General Science classes. It explores the history, structure and function of the Metric System and comprehensively shows its application in real world situations. Universal Education and Visual Arts. 1974. Titles: I. Measuring, II. The Basic System, III. A New World, IV. The Metric Kitchen, V. A Metric Day, VI. The Metric Universe.

(6 filmstrips, with records or cassettes, \$90)

### *The Metric System for Intermediate Grades, Set 1: Length, Area and Volume (GR4-8)*

Dave and Jim with the help of Mr. Metro learn to build a soap box racer and to make a map. Mr. Metro also helps Sue and Jane measure area and volume. Pathescope. 1973. Titles: Units of length less than a meter; Units of length greater than a meter; Metric units of area; Metric units of volume.

(4 filmstrips, with records, \$58)

(4 filmstrips, with cassettes, \$66)

*The Metric System for the Intermediate Grades, Set 2 (GR 4-8)*

Capacity, mass, metric relationships. Pathescope. 1974. Titles: "Metric Units of Capacity," "Metric Units of Mass," "Relating Length, Capacity, and Mass."  
(3 filmstrips, 3 records, No. 307, \$44)  
(3 filmstrips, 3 cassettes, No. 307C, \$50)

*Metric System of Measurement*

Learning Resources Division, Educational Development Corp. 1974. Titles: "History of Measurement," "Measuring Length," "Measuring Weight," "Measuring Volume."  
(4 filmstrips, with records, \$51.80)  
(4 filmstrips, with cassettes, \$58)

*Metric System of Measuring (GR 5-8)*

A captioned filmstrip which clearly develops the metric sequence. There is some comparison between English and metric measurements, but emphasis is on meters and derived units. One in the Measuring series. Encyclopaedia Britannica. 1966.  
(1 filmstrip, \$6.00)

*Metric System of Weights and Measures (PRIMARY - JR. HIGH)*

Includes progress graphs and metric charts. Topics covered in units: length, weight, capacity, area and volume, and conversions. International Tutors. 1972.  
(63 filmstrips, Set No. 7, \$140)

*The Metric System - The Universal Language of Measurements (GR 7 - COLLEGE)*

Provides illustrations and discussions to help the student learn the metric prefixes and apply them to all metric measures; gain a solid grasp of meters, grams, liters, square and cubic units; and comprehend conversions between metric units as well as conversions between the English and the metric system. Pathescope. 1971.  
(6 filmstrips, 6 records, No. 516, \$85)  
(6 filmstrips, 6 cassettes, No. 516C, \$95)

*Metric Weights and Measures (GR 7-12)*

Illustrates the principles of length, volume and weight in the metric system. Library Filmstrip Center. 1973.  
(1 filmstrip, 1 cassette with audible signal, \$23)  
(1 filmstrip, 1 cassette with inaudible signal, \$23)  
(1 filmstrip, 1 record, \$21)

*Metriation of America (PRIMARY - JR. HIGH)*

Presents the origin of the metric system and shows interrelationships of length, mass, and capacity and how decimal arithmetic is used exclusively. Emphasis on units necessary for daily usage. Westinghouse Learning Press. 1974. Titles: "The Metric System," "Length," "Mass," "Volume."  
(4 filmstrips, 4 records, WE 4-48110, \$69.50)  
(4 filmstrips, 4 cassettes, WE 5-48110, \$69.50)

*Metrics (GR 3-6)*

Illustrates familiar kinds of measurement activities using the metric system. Based on the "I do, I learn" teaching philosophy. AIDS, 1973.  
(5 filmstrips, with records, \$80)  
(5 filmstrips, with cassettes, \$80)

*Picturing Metrics (PRIMARY - INTERMEDIATE)*

Program of filmstrips and activity cards designed to help student learn a beginning metric vocabulary and to relate metric units to the sizes of objects around them. No emphasis on conversion. BFA Educational Media. 1974. Titles: "A System for Measuring," "Measuring Length," "Measuring Volume," "Measuring Weight."  
(4 filmstrips, 4 records, 25 activity cards, VEA-807, \$58)  
(4 filmstrips, 4 cassettes, 25 activity cards, VEB-807, \$66)

*Science Processes: Measuring, Set 2 (GR 4-7)*

Develops the need for measuring length, volume, weight, and temperature and then compares the English and the metric systems. The content is valid through junior high, although the photographs show primary-grade children. McGraw-Hill. 1972. Titles: "Length," "Volume," "Weight," "Temperature," "Making a Graph," "Ordering Events by Time."  
(6 filmstrips, \$41)

*Think Metric! (GR 4-8)*

Involves the student in problem-solving activities. Educational Activities, Inc. 1973. Titles: "Introducing the Metric System," "Metric Units of Length," "Metric Units of Weight," "Metric Units of Capacity."  
(4 filmstrips, 4 records, No. FSR 437, \$45.90)  
(4 filmstrips, 4 cassettes, No. FSC 437, \$49.90)

*Think Metric (GR 7-12)*

Presents background information on the metric system, the interrelationships of the various metric measurements, and their use in everyday life. Educational Products. 1973.  
(set of 2 filmstrips, cassette, 2 books and 1 bumper sticker, No. 4810, \$29)

*Think Metric (GR 3-6)*

Metricat, an ingenious cat-professor, takes the viewer through experiences involving measurement. Emphasis on getting a "feel" for metric units, not on conversion. Filmstrip House. n.d. Titles: "Introduction to Units of Measure," "Linear Measure," "Volume Measure," "Weight," "Area," "Comparison."  
(6 captioned filmstrips, guides, \$36)

*Thinking Metric (INTERMEDIATE – JR.-SR. HIGH)*

Metric system is presented as a logical system of units. Comparisons with the English system are used, but exact mathematical conversions are avoided. Eye Gate. 1973. Titles: "Why Metric?" "Length, Width, Height & Speed," "Volume and Capacity," "Mass and Weight."  
(set of 4 filmstrips with 2 cassettes, No. TX463, \$41.75)

*Understanding the Metric System (PRIMARY – INTERMEDIATE)*

Easy to understand vocabulary and artwork in a cartoon style, featuring two central characters with whom students can readily associate. Clearvue. 1974. Titles: "What is Measurement?" "Measuring Distance," "Measuring Weight and Mass," "Measuring Volume."  
(4 filmstrips, 2 records, teacher's guide, No. CL 550-SCR, \$36.50)  
(4 filmstrips, 2 cassettes, teacher's guide, No. CL 550-SC1C, \$40.50)

*Using the Metric System (GR 4-8)*

Captioned color filmstrip covers weight, temperature, cubic, and linear measurements. Popular Science Pub. Co. 1967.  
(1 filmstrip, No. 185, \$7.50)

*Using the Metric System (GR 6-12)*

Shows the use of the Metric System in easy to understand terms related to everyday occurrences. An excellent introduction for all students entering the world of metrication. Universal Education and Visual Arts. 1974. Titles: I. Measuring Length, II. Measuring Capacity, III. Measuring Mass, IV. Measuring Temperature, V. Calories, VI. Metric Tools.  
(6 filmstrips, with records or cassettes, \$90)

*Using the Metric System: Problem Solving Computation (INTERMEDIATE)*

Teaches the fundamental techniques of problem solving through story problem situations requiring the use of the metric system. Includes teacher's guide and scope and sequence chart. Knowledge Aid. n.d.  
(6 sound filmstrips, No. 6310, \$75.50)

## GAMES

### *Centimeter Decimal Set* (GR 4-8)

Invicta.

(1 game, plus guide. No. 145, \$2.45)

### *Decimeter: A Metric Game for School and Home* (GR 4- ADULT)

Competitive game for 2 to 6 players who roll dice to proceed around the board. Action consists of making purchases of items measured in metric units of length, volume, and mass. Lawhead Press. 1974.

(Individual Game, \$7.60)

(Classroom set of 5 games, \$32.50)

(School set of 10 games, \$60)

### *Meter-Liter-Gram* (PRIMARY – ADULT)

Educational game in which the stimulation of competition enhances the learning of metric units, symbols, terminology and unit relationships. Designed by Wesley Hampton. Real-T-Facs. 1973.

(1 game, \$9)

### *Metric Match: A Game for Teaching the Metric System* (ALL AGES)

Designed to give practice in recognizing equivalent metric measures. Set I includes linear and square measure, and Set II covers volume and weight. Object of game is to match pairs of metric equivalents. Creative Sights and Sounds. 1973.

### *Metric System* (GR 1-6)

Math select-a-step program in which players mount a control strip on the base peg board, then match the answers to the questions. Pegs will accept only correct answers. Visionetics.

(base peg board, No. V-900000, \$3)

(Grade 2 program, No. 216206, \$2.25)

(Grade 3 program, No. 216306, \$2.25)

(Grade 4 program, No. 216405, \$2.25)

### *Metric Trundle Wheel* (GR 4-8)

The circumference of the wheel is one meter, marked in 5 cm and 25 cm divisions. A click is emitted after each complete revolution. To measure a given distance, the pupil walks with the wheel and counts the clicks. Invicta.

(1 game, No. 340, \$5.50)

### *Metrickation Game* (INTERMEDIATE – ADULT)

Board game for 2 or 4 players, involving travel, skill, investment, collection and chance. Emphasis on the number 10 throughout the game. Metrix Corporation. 1973.

(\$10)

## MISCELLANEOUS ITEMS (Multi-media Kits, Realia, etc.)

Note: Most producers will assemble kits to specifications upon request.

### *Bathroom Scales, Think Metric* (ALL AGES)

Colorful scale for children or adults shows weights in both kilograms and pounds. Swani. (\$9.95)

### *CC Cubes* (ALL LEVELS)

Acquaints students with the feel and look of a centimeter. Useful for linear and volume measurement activities. Sorting tray included in each package. A. Balla & Co. 1974.

(200 cubes, \$6.50)

(500 cubes, \$12.75)

(1,000 cubes, \$21.95)

### *Cuisenaire Rods (GR K-3)*

Twenty-four individual sets of rods with instructional guide. Multicolored cubes and rods up to 10 centimeters. Cuisenaire Co.  
(24 sets, with guide, \$74.95)

### *Demonstration Spring Scales (ALL LEVELS)*

Face measures  $8\frac{1}{4}$ " diameter with  $\frac{3}{4}$ " black numerals. Easy to read from rear of classroom. Available in metric or Newton standard. Ohaus Scale Corp.  
(Model No. 8015, 20 x  $\frac{1}{2}$  hectogram, \$7.25)  
(Model No. 8016, 20 x  $\frac{1}{2}$  Newton, \$7.25)

### *Introductory Metric Kit*

Allows student to become familiar with basic units of metric measurement using an activity-oriented approach. Includes rulers, tape measures, trundle wheel, scales and weights, and beaker. Teacher's guide. Educational Teaching Aid.  
(No. 10A, \$96.50)

### *Liter Volume (GR 4-8)*

Cube containing factual information on cardboard sides. Science Related Materials. 1973.  
(kit, No. 1940 SRM, \$1.95)

### *Measurement and Metric System Science Packet*

15 metric teaching aids including centimeter rulers, booklets, graph paper, decimeter box, charts, conversion tables, lesson plans, and resource listings. National Science Teachers Assn. 1973.  
(No. 479-14280, \$3)

### *Measurement Skills (PRIMARY)*

Audio-tutorial kit. Involves seeing, hearing, and touching through color filmstrips, cassettes, game cards, practice pads, and rulers. Teacher's guide. Encyclopaedia Britannica Educational Corp. 1972.  
Titles: "Inches and Fractions," "Centimeters and Decimals."  
(complete kit, boxed, \$58.75)  
(Bilingual (Spanish-English) edition, \$58.75)

### *Measuring: A Metric Approach (GR K-5)*

Six-part program complete with sound filmstrip, manipulatives, student activity cards, program guide, and parent fact guides. Uses children in real situations to introduce concepts. Schloat Productions. 1974. Titles: "Introduction," CA 133, \$39.00; "Length," CA 134, \$67.00; "Area," CA 135, \$65.00; "Volume," CA 136, \$47.00; "Weight," CA 138, \$48.00.  
(Complete kit, with Balance, CA 141, \$317.00)

### *Metric Bathroom Scales (ALL LEVELS)*

Borque Erickson.  
(\$5.20)

### *The Metric Center (GR 5-12)*

Covers metric system, length, area, volume, mass, and temperature. Includes visual cartridges, measurement tools, worksheets, and manual. Enrich.  
(kit, \$44.95)

### *Metric Conversion Kit - I*

Kit includes wall chart, measurement converter, a book, and metric tape measure and ruler. Real-T-Facs. 1973.  
(kit, \$10)

### *Metric Exercises*

A kit for teaching the metric system of measurement. Includes activities and exercises for different grade levels, a metric ruler, thermometer, and "Metric Is Coming" brochure. National Science Teachers Assn.  
(No. 471-14664, \$6)

***Metric Involvement Kit (ALL LEVELS)***

Includes manipulatives and activities in use of SI. Non-conversion oriented, with teacher's guides. Enrich.  
(Kit S 10, \$76.00)

***Metric Lab (Kit) (GR 3-6)***

Emphasizes involving the student in activities and utilizing manipulatives. Includes duplicating masters, Telor Learning Aids, and teacher's guides. Enrich.  
(Kit E 10, \$110.00)

***Metric Manipulatives (GR 4-8)***

"All Metric" cassette manipulative programs for developing skills in estimating and measuring in metric units. Each kit includes self-pacing cassette, posters, spirit masters, and appropriate manipulatives, with teacher's manual. Weber Costello. 1973. Titles: "Measuring Length and Area," WC-804-005; "Measuring Weight," WC-804-013; "Measuring Liquid Volume," WC-804-021.  
(Individual kits, \$14.95 each)  
(Set of 3 kits, WC-804-039, \$42.50)

***Metric Measure (GR 7-12)***

For calculating the area and the volume. Set contains prisms, cylinders, pyramids, cones, etc., in a wooden case. Creative Visuals.  
(kit, guide, No. SWB, \$132.50)

***Metric Measurement (GR 3-6)***

Complete learning program consisting of 13 lessons, 20 student activities, 2 whole class activities, 1 sound filmstrip, and a game. Materials are grouped within instructional modules. Imperial International Learning Corporation.  
(class size unit, No. 321-000-00, \$450)

***Metric System Minimodule (PRIMARY)***

Box, an animated character, works in the Mathematics Laboratory to discover the meaning of and relationships among metric units of length, weight, and capacity. SVE. 1974.  
(6 sound filmstrips, games, activities, \$134.50)

***Metricube Computer and Desk Top Educator (GR 4 - ADULT)***

Each of the six surfaces illustrates the key parts of the metric system in simple terms. A mechanical working cube, it has two disc converters and two slide-type, built-in calculators. One litre in volume. Polymetric Services.  
(Metricube, AA2, \$5.25)

***Metrikit***

Comparative English-metric measurement kit complete with tools, reference, and training materials for home, industry, and education. Larry Harkness Co.  
(kit, \$38.70)

***Metri-Kit***

Consists of several booklets, books, wall posters, measuring tape, and converters. Swani Division or Regal-Beloit. 1972.  
(\$13.00)

***Metrikit A - Introductory***

Includes tools to help young hands and developing minds to understand how big and how much. Consists of measuring sticks, scales, capacity measures, and cubes. Dick Blick.  
(No. 88001, \$125.80)

***Metrikit B - Linear Measurement***

Includes tools designed so that the relationships among the units of length are made quite clear. Consists of rules, sticks, calipers, tape measures, and a micrometer. Dick Blick.  
(No. 88002, \$106.80)

### *Metrikit C -- Weight and Mass*

Includes items designed to show how weight and mass are related to each other. Consists of scales, weight boards, and balances. Dick Blick.  
(No. 88077, \$147.50)

### *Mini-metric Lab (GR 6-9)*

Provides students with instruction in measuring length, volume, and mass by integrating practical experience with the instruction. The set has good sequential development and concludes with a short section on conversion, recognizing the fact that this will be necessary for a few years. Aero Educational Products. 1974.

(Programmed instruction, 6 slates, 2 sets of practice forms, 6 rulers, 2 tapes, 60 cm cubes, 18 boxes, \$49.50)

### *Osmiroid Educational "Measure and Observe" Action Learning Cards (K -- INTERMEDIATE)*

Designed to give infants and juniors an understanding of and practical experience in observing metric measurement in a variety of ways. One hundred activities are presented in easily-read script with attractive illustrations on 48 laminated cards. Educational Teaching Aid. 1972.

(Set of 48 cards, No. 4365, \$11.95)

### *Quick Conversion Units (GR 1-6)*

Two triangular wands, each equipped with a sliding "sight" ring to be used for conversions. Centimeter/inch converter shows the linear and metric equivalents. Visionetics. 1969.

(kit of 20 wands, 2 transparencies, No. 121, \$14.95)

### *Rulers (GR 1-6)*

Set of 12" rulers in color on laminated board. One centimeter ruler, and four standard rulers. Visionetics.

(kit of 30 rulers, 1 transparency, No. 209656, \$5.40)

### *Single Beam Balance Scale with Metric Weights (GR 4-10)*

Graduated in avoirdupois and metric. Ideal.

(kit of scale, 8 weights, No. 5346, \$18.50)

## POSTERS

### *Metric Posters (PRIMARY -- ADULT)*

Small situational posters covering relationship between English and Metric units in our daily lives. Includes temperature, length, volume, and mass. American National Metric Council. 1974.

(Set of 4 posters, 8½" x 11", \$3.00)

### *Metric System*

Ten 8½" x 11" posters printed on colored index stock show the fundamentals of the metric system. A transparency can be made from each unique poster to aid in your lesson and then the poster can be placed on the bulletin board to remind students of what they learned. Jem Innovations.

(10 posters, \$2.45)

### *Metrically Speaking (ALL AGES)*

Colored cartoon posters each conveying one important point about the process of changing from the English to the metric system. Stanley Tools. 1972.

(Set of 10 posters, 26" x 20", \$12.95)

### *Think Metric Posters*

Six different illustrations, 432mm x 559mm (17" x 22") show metric dimensions, size, weight, temperature, and liquid volume. National Microfilm Assn.

(set of 6 posters, \$5.75)

## RECORDINGS

### *The Implication of Metric Change* (GR 9 – ADULT)

Reports given by executives, labor leaders and government officials on "A Metric America," "What Is SI?," "The British Experience," "Effect on Large Companies," "Preparing to Convert," "Technical Considerations," "Labor Considerations," "The Government's Role," and "Making Conversion Profitable." Chicago Assn. Commerce and Industry. (set of 4 cassettes, \$20)

### *Let's Talk Metric* (GR 4-8)

Discusses the history of measurement, the terms of the metric system, the relationship between English and metric systems, and the approximate conversions. Creative Services. 1973. (1 cassette, 1 card, \$9)

### *Linear Conversion: English to Metric* (GR 7-9)

Applying one fundamental relationship, a series of worksheet examples of conversions from English to metric measurement is given. The learner develops conversion factors for future use. Wollensak. 1968. (1 cassette, guide, worksheet, No. C – 7703, \$9.95)

### *Linear Conversion: Metric to English* (GR 7-9)

A description of the conversion factors necessary in forming equality among different measuring systems is presented. Following steps used to solve one conversion problem, the learner is guided in solving others developed on the worksheet. Wollensak. 1968. (1 cassette, guide, worksheet, No. C-7704, \$9.95)

### *The Metric System* (GR 7 – ADULT)

Lessons: introduction; linear-millimeter to meter; linear-meter to kilometer; using symbols; perimeter; area of rectangles; area of triangles; area of circles; conversion-linear; mass weight; liquid measure, and conversion-liter. ESP. 1973. (1 cassette, 1 workbook, \$5.95)

### *The Metric System* (GR 7-12)

Includes the English and Metric system/precision in measurement: linear measurement; square measurement; cubic measurement; mass; power/energy; money/temperature; conversions; conversions – fraction to decimal/linear measurement problems/square measurement problems; cubic measurement problems/mass measurement problems; power-energy problems/money-temperature problems. ESP. 1972. (12 cassettes, teacher's guide with duplicating masters, \$60)

### *The Metric System* (GR 4-6)

Instructs in naming the units of length and relationships of units with the meter. Media Materials. n.d. (1 cassette, workbook, guide, No. 4187-A, \$9.95)

### *The Metric System* (GR 7-9)

A short review of the metric system; definitions of segments of the meter and its multiples are given. The prefixes are explained and their uses are outlined in worksheet activity. Wollensak. 1968. (1 cassette, guide, worksheet, No. C-7701, \$9.95)

### *Metric System of Weights and Measures*

Includes basic principles; length; weight; capacity; area; volume; equivalent volume; equivalent weight; volume, or capacity of water. International Tutors. n.d. (complete set of 8, No. C362-C369, \$40) (individual cassettes, \$5.95 each)

*Metric System Skills and Drills* (GR 4-8)

Each recording teaches four complete, single concepts lessons. Prior to each series of questions, the material is taught and examples are given. Answers are given after each lesson for immediate reinforcement. Educational Activities. Titles: "Introducing the Metric System: Working With Basic Prefixes," "Metric Units of Length," "Metric Units of Weight," "Metric Units of Capacity."

(records, No. AS 720-723, \$23.95)

(cassettes, No. AC 720-723, \$27.95)

*Metric Teaching Tapes* (GR 3-8)

Cassettes, worksheets, measuring devices to cut out and use, maps, and scale drawings. Teacher's guide. Houghton-Mifflin. 1973. Titles: "Measuring Length," "More on Measuring Length," "Measuring Area," "Measuring Volume," "Measuring Weight," "Review and Temperature."

(set of 6 cassettes, \$36)

(individual cassettes, \$7.20 each)

*Working with the Metric System* (SR. HIGH – ADULT)

Self-paced lessons on metric measurement. Houghton-Mifflin. 1974.

(set of 6 cassettes, worksheets, guide, \$39)

## SLIDES

*The Kilos are Coming* (ADULT)

Covers the history of weights and measures and the development of the metric system. Includes 43 slides, script, and resource list. Faith Prior & Virginia Jodoin, University of Vermont. 1969

(All orders must be prepaid, \$13.00)

*Measurements*

Projectiles are 2" x 2" slides in cardboard mounts, with cassettes and workbooks. Communications Skills Corp. 1973. Titles: "Metric System of Linear Measurement," MS-2480-11-A (\$35) (includes centimeter ruler); "Metric System of Measurement," MS-2480-11-B (\$35) (Volume and Mass); "Conversion Between Systems," MS-2480-11-C (\$35); "Density and Specific Gravity," MS-2480-11-D (\$35); "Temperature," MS-2480-11-E (\$35).

(5 slide sets, above, No. MS-2480-10, \$157.50)

(sound filmstrip set, No. MS-2480-14, \$157.50)

*Metric System and You*

Maynard Research Council.

(149 slides, cassettes, guide, \$95)

*Think Metric* (JR. – SR. HIGH)

Set contains 35 slides, script, resource list, activities, recipes, and leader's guides. Virginia Jodoin, University of Vermont. 1974.

(All orders must be prepaid, \$10)

*Think Metric: Understanding and Using the Metric System* (JR. – SR. HIGH)

Program designed to convey the ease of measuring in metric units. Provides practice problems and many examples of everyday applicability. Denoyer-Geppert. 1973.

(80 slides, manual, No. 86975-S, \$73.50)

## TRANSPARENCIES

### *Basic Trade Measurements-Decimals* (GR 7-12)

Includes decimal notation, comparison of decimal and fractional rulers, the micrometer, enlargement of the thimble scale, simplified meter scales, multiple scale meters, etc. United Transparency.

(10 transparencies, No. 8857, \$19.50)

### *The Kilos Are Coming* (ADULT)

Developed to introduce the fact that systems of measurement have changed over time; and to promote understanding of the metric system. Faith Prior & Virginia Jodoin, University of Vermont. 1969.

(44 black & clear transparencies, script & resource list, \$6.00)

(All orders must be prepaid.)

### *Learning to Use Metrics* (JR. - SR. HIGH)

Introduces the basic terms and concepts of the metric system. Teacher's manual with suggested activities and additional information. Mafex Associates. 1973. Titles: 318300 Introduction to Metric, 9 trans., \$57.60; 318400 Basic Metric Units, 6 trans., \$38.40; 318500 Length, 7 trans., \$44.80; 318600 Area, 6 trans., \$38.40; 318700 Volume, 6 trans., \$38.40; 318800 Weight, 6 trans., \$38.40; 318900 Temperature, 6 trans., \$38.40.

(Complete set of 46 transparencies, 319000, \$276)

### *Measurement*

Covers measurement and its historical importance. Includes advantages of metric system, the prefixes, and calibrated measuring instruments. Student booklet. Channing L. Bete. 1966.

(No. 3979-6105, \$69)

### *Metric System*

Introduces the metric system and includes all of the terms and concepts encountered, short of those encountered in highly sophisticated scientific work. Teacher's manual. Creative Visuals. 1974. (set of 46 transparencies, No. 389 AO-SR, \$276)

(individual transparencies, \$7 each)

### *Metric System and Apothecaries Equivalents* (GR 10 - ADULT)

Includes the metric system; basic units of measure; multiples of the unit; division of the unit; capacity of volume; converting grams to milligrams; converting liquid measure; apothecaries weight; converting grams to grains; metric and apothecaries system; volume; converting ounces, grams and milliliters; converting pounds and kilograms; and converting Centigrade and Fahrenheit scales. Robert J. Brady.

(12 transparencies, guide, \$55)

### *Think Metric!* (JR. HIGH)

Everything one needs to know to shift from the English system to the metric system. DCA Educational Products. 1972. Titles: Group I - "Metric Units" (\$40.50); Group II - "Conversion Factors" (\$8.10); Group III - "Estimating Weights and Measures" (\$30.60).

(complete series, \$80)

## ADDRESSES OF PRODUCERS

Aids Audiovisual Instructional Devices, Inc.  
24-20 Little Neck Blvd.  
Bayside, N.Y. 11360

AIMS Instructional Media Services, Inc.  
Box 1010  
Hollywood, Calif. 90028

Aero Educational Products  
St. Charles, Illinois 60174

American Educational Films  
132 Lasky Drive  
Beverly Hills, Calif. 90212

American National Metric Council  
1625 Massachusetts Ave., N.W.  
Washington, D.C. 20036

A. Balla & Co.  
P.O. Box 24200  
Ft. Lauderdale, Fla. 33307

Barr Films  
P.O. Box 7 - C  
Pasadena, Calif. 91104

BFA Educational Media  
2211 Michigan Ave.  
Santa Monica, Calif. 90404

Dick Blick  
P.O. Box 1267  
Galesburg, Ill. 61401

Robert J. Brady Co.  
130 Que St., N.E.  
Washington, D.C. 20002

Channing L. Bete Company, Inc.  
45 Federal St.  
Greenfield, Mass. 01301

Chicago Assn. of Commerce and Industry  
130 S. Michigan Ave.  
Chicago, Ill. 60603

Clearvue Inc.  
6684 North Oliphant Ave.  
Chicago, Ill. 60631

Communication Skills Corp.  
P.O. Box 684  
Fairfield, Conn. 06430

Coronet Films  
65 E. South Water St.  
Chicago, Ill. 60601

Weber Costello Co.  
1900 N. Narragansett Ave.  
Chicago, Ill. 60639

Creative Services  
108 St. Johns Road  
Baltimore, Md. 21210

Creative Visuals  
Box 1911 - S3 - A  
Big Spring, Tex. 79720

Cuisenaire Company of America  
12 Church St.  
New Rochelle, N.Y. 10805

DCA Educational Products  
4865 Stenton Ave.  
Philadelphia, Pa. 19144

Denoyer-Geppert  
5235 Ravenswood Ave.  
Chicago, Ill. 60640

Educational Activities, Inc.  
P.O. Box 392  
Freeport, N.Y. 11520

Education Corp. of America  
984 Livernois Road  
Troy, Mich. 48084

Educational Development Corp.  
202 Lake Miriam Dr.  
Lakeland, Fla. 33803

Educational Products  
5005 W. 110th St.  
Oak Lawn, Ill. 60453

Educational Teaching Aids  
Div. of A. Daigger & Co.  
159 W. Kinzie St.  
Chicago, Ill. 60610

Encyclopaedia Britannica Educational Corp.  
425 N. Michigan Ave.  
Chicago, Ill. 60611

Enrich  
3437 Alma St.  
Palo Alto, Calif. 94306

ESB-Edcomb  
19 W. College Ave.  
Yardley, Pa. 19067

Eye Gate House, Inc.  
146-01 Archer Ave.  
Jamaica, N.Y. 11435

Borque Erickson  
1133 N. Kilbourn Ave.  
Chicago, Ill. 60651

ESP, Inc.  
2304 E. Johnson  
Jonesboro, Arkansas 72401

Filmstrip House  
6633 W. Howard St.  
Niles, Ill. 60648

Ford Motor Company  
Educational Affairs Dept.  
The American Road  
Dearborn, Mich.

Guidance Associates  
41 Washington Ave.  
Pleasantville, N.Y. 10570

E. M. Hale & Co.  
Eau Claire, Wis. 54701

Larry Harkness Company  
115 N. Princeton Ave.  
Villa Park, Ill. 60181

Houghton-Mifflin Company  
110 Tremont St.  
Boston, Mass. 02107

Ideal School Supply Co.  
11000 South Laverne Ave.  
Oak Lawn, Ill. 60453

Imperial International Learning Corp.  
Box 548  
Kankakee, Ill. 60901

Instructor Publications, Inc.  
Instructor Park  
Dansville, N.Y. 14437

International Tutors  
Department A, 22303 Devonshire  
Chatsworth, Calif. 91311

Invicta Plastics  
items available from  
Creative Publications

Jem Innovations  
4568 E. 45th St.  
Tulsa, Okla. 74135

Journal Films, Inc.  
909 W. Diversey Parkway  
Chicago, Ill. 60614

Kavic House  
1 Eaton Court  
Wellesley Hills, Mass. 02181

King Screen Productions  
320 Aurora Ave., N.  
Seattle, Wash. 98109

Knowledge Aid  
6633 W. Howard St.  
Niles, Ill. 60648

The Lawhead Press, Inc.  
900 E. State St.  
Athens, Ohio 45701

Library Filmstrip Center  
3033 Aloma  
Wichita, Kan. 67211

Mafex Associates, Inc.  
111 Barron Ave.  
Johnstown, Pa. 15906

Maynard Research Council, Inc.  
300 Alpha Drive  
Pittsburgh, Pa. 15238

McGraw-Hill, Inc.  
1221 Ave. of the Americas  
New York, N.Y. 10020

Media Development, Inc.  
2403 Helen St.  
Kalamazoo, Mich. 49002

Media Materials, Inc.  
409 W. Cold Spring  
Baltimore, Md. 21210

Metric Association, Inc.  
Sugarload Star Route  
Boulder, Colo. 80302  
Instructional Materials formerly  
available from Metric Association  
are now sold by:  
Ideal School Supply Co.  
1100 S. Laverne Ave.  
Oak Lawn, Ill. 60453

Metrix Corporation  
P.O. Box 19101  
Orlando, Fla. 32814

Multimedia Productions  
P.O. Box 5097  
Stanford, Calif. 94305

National Microfilm Association  
Suite 1101  
8728 Colesville Road  
Silver Spring, Md. 20910

National Science Teachers Association  
1201 16th St., N.W.  
Washington, D.C. 20036

NBC Educational Enterprises  
30 Rockefeller Plaza  
New York, N.Y. 10020

Ohaus Scale Corporation  
29 Hanover Road  
Florham Park, N.J. 07932

Oxford Films  
300 W. Golf Road  
Mt. Prospect, Ill. 60056

Pathescope Educational Films, Inc.  
71 Weyman Ave.  
New Rochelle, N.Y. 10802

Polymetric Services  
4600 Brewster Drive  
Tarzana, Calif. 91356

Popular Science Publishing Co., Inc.  
Audio Visual Division  
355 Lexington Ave.  
New York, N.Y. 10017

Realty Facs  
P.O. Drawer 449  
Warwick, N.Y. 10990

Schloat Productions  
150 White Plains Road  
Tarrytown, N.Y. 10591

Science Related Materials  
P.O. Box 1422  
Janesville, Wis. 53545

Society for Visual Education, Inc.  
1345 Diversey Parkway  
Chicago, Ill. 60614

Stanley Tools  
P.O. Box 1800  
New Britain, Conn. 06050

Sterling Educational Films  
241 E. 34th St.  
New York, N.Y. 10016

Swani Publishing Company  
Box 248  
Roscoe, Ill. 61073

TAD Products  
639 Massachusetts Ave.  
Cambridge, Mass. 02139

3M Company  
Visual Products Division  
3M Center  
St. Paul, Minn. 55101

Troll Associates  
320 Route 17  
Mahwah, N.J. 07430

Union Carbide Corporation  
Educational Aids Dept.  
P.O. Box 363-B  
Tuxedo, N.Y. 10987

United Transparency  
P.O. Box 888  
Binghamton, N.Y.

Uniten Systems  
246 W. 34th St.  
Indianapolis, Ind. 46208

Universal Education and Visual Arts  
221 Park Ave., S.  
New York, N.Y. 10003

University of Vermont  
Mrs. Virginia Jodoin  
Consumer Specialist  
211 Terrill Hall  
Burlington, Vermont 05401

Visionetics, Inc.  
38-20 Woodside Ave.  
Long Island City, N.Y. 11104

Visual Education Consultants  
Box 52  
2066 Helena St.  
Madison, Wis. 53701

Visual Instruction Productions  
295 W. 4th St.  
New York, N.Y. 10014

Westinghouse Learning Press  
100 Park Ave.  
New York, N.Y. 10017

Wollensak  
see 3M Company